

General Office: 772 Horizon Drive, Grand Junction, CO 81501 Corporate Office: 212 West Michigan Avenue, Jackson, MI 49201 Registered Office: 141 East First South, Salt Lake City, UT 84111 (303) 245-5460 (517) 787-8415 (801) 534-0734

May 4, 1979

Mr. Ron Daniels
State of Utah, Division of Oil,
Gas and Mining
DEPARTMENT OF NATURAL RESOURCES
1588 West North Temple
Salt Lake City, Utah 84116

Dear Mr. Daniels:

Enclosed is Plateau Resource Limited's Notice of Intention to Commence Mining Operations (MR1), Mining and Reclamation Plan (MR2) and Commitment to Rule M-10 (MR8) for the proposed Frank M mine operation in Garfield County, Utah. Also enclosed is a map showing the area to be effected by the proposed mine operation.

Please advise me if you need any additional information.

Sincerely,

Pam Newman

Administrative Assistant

PN

enclosures

cc: Mr. R. B. Sewell

Mr. E. F. Jacobson



MINING APPLICATION
NO. ACT/017/017

Date 5/4/79

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

# NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS (See Rule M of General Rules and Regulations)

| 1.                 | Name of Applicant or Company PLATEAU RESOURCES LIMITED  Corporation (X) Partnership () Individual ()  |
|--------------------|---|
| 2.                 | Address 772 Horizon Drive Grand Junction, Colorado 81501 Permanent Temporary  |
| 3.                 | Name and title of person representing company <u>E. F. Jacobson, Mine Manager</u>   |
| 4.                 | Address 772 Horizon Drive Office Phone (303) 245-5460   |
| 5.                 | Location of Operation SW4.NE4 Sec. / 2 + 3 T. 35S R. 11E  |
| 6.                 | Name of Mine Frank M  |
| 7.                 | Mineral to be mined:  ( ) Coal ( ) Flagstone ( ) Copper ( ) Gravel Horizontal Drifts ( ) Manganese ( ) Shale ( ) Iron Ore ( X ) Uranium laterals to stope development ( ) Phosphate ( ) Gilsonite ( ) Potash ( ) Bituminous Sandstone pillar removal ( ) Fluorspar ( ) Tungsten ( ) Other (specify)  Have you or any person, partnership or corporation associated with you received an approved Notice of Intention to Commence Mining Operations by |
| RECEIVI<br>MAY 101 | Owner/Owners of record of the surface area within the land to be affected:  Mr. Orawell Williams (Holder of State Address Teasdale, Utah 84773  Address  Address  |
|                    | BLM (man) Address   |
| Wille              | Address   |
|                    |   |

|      | ateau Resources Li   |           | Address     | 772 1101        | rizon Drive                                 |
|------|--|-----------|-------------|-----------------|---|
|      |  |           | Address _   |                 |   |
|      |  |           | Address     |                 |   |
|      |  |           | Address     |                 |   |
|      | er/Owners of record of ected:  | all other | minerals w  | ithin an        | y part of the land                          |
| Mr.  | . Claude B. Hamil  |           |             |                 | st City National<br>Iding, Houston, TX 7700 |
|      |  |           |             |                 |   |
|      |  |           | _Address    |                 |   |
| Have | the above owners been $(\chi)$ Yes   |           |             | copi (copi      | ies of letters attached                     |
| to b | rce of Operator's legale covered by the Notion   | ce Mining | g Claims a  | onduct ond Stat | operations on land<br>te Lease #32305       |
|      | coximate acreage to be   |           |             |                 |   |
| A)   | Mining Operation Among the Control of the Control o |           |             |                 | _acres                                      |
| B)   | Access Road or Hau   | lageway - | 18.3        | 6               | _acres                                      |
| C)   | Drainage System -  |           | -0          |                 | acres                                       |
|      | TOTAL ACRES  |           | 65.5        | 1               |   |
|      | the names and post of<br>cer, Partner, (or per   |           |             |                 |   |
|      | Name:  |           | Title:      |                 | Address:                                    |
| a    | R. C. Youngdahl  | Pı        | resident    | 212 W.          | Michigan Ave., Jackson                      |
| ь.   | R. L. Heiks  | V         | ice Preside | ent             |   |
|      | B. O. Fisher   |           | ice Preside |                 | 772 Horizon Drive<br>Grand Junction, CO     |
| с.   | R. B. Sewell   | Ms        | gr. of Open | rations         |   |
|      |  |           |             |                 |   |

If yes, explain:

| STATE OF Colorado  |
|--|
| COUNTY OF Mesa   |
| I, R.B. Sewell , having been duly sworn  |
| depose and attest that all of the representations contained in the foregoing   |
| application are true to the best of my knowledge; that I am authorized to  |
| complete and file this application on behalf of the Applicant and this   |
| application has been executed as required by law.  |
| Signed: Beweef   |
| Taken, subscribed and sworn to before me the undersigned authority   |
| in my said county, this 4th day of May, 1979.  Notary Public: Pann Mewman  |
| Notary Public: Fan Illewman  |
| My Commission Expires: 4/1/8/  |
|  |
| PLEASE NOTE:   |
| Section 40-8-13(2) of the Mined Land Reclamation Act provides as follows:  |
| "Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21." |
| Is confidential information contained herein?  |
| YES(Initial)   |
| NO RRO (Initial)   |
| Sections desired to be maintained as confidential information -  |
|  |
|  |

| MINING       | APPI | LICAT | ION | _ |
|--------------|------|-------|-----|---|
| MINING NO. A | CT   | 1017  | 101 | 1 |
| Date _       | 5    | 14    | 179 |   |

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 1588 West North Temple Salt Lake City, Utah 84116

# MINING AND RECLAMATION PLAN

(Other forms may be used in lieu of MR  $^{2}$ , provided they contain the same information)

| 1.  | Name of Applicant or Company PLATEAU RESOURCES LIMITED  |
|-----|---|
| 2.  | Proposed type of operation Underground Uranium Mining   |
| 3.  | (a) Prior Land Use(s) grazing, mineral exploration, mining (b) Current Land Use(s)grazing, mineral exploration, mining  |
| 4.  | (c) Possible or Prospective Future Land Use(s) grazing, mineral exploration mining What Vegetation exists on the land proposed to be affected   |
|     | see Attachment 2  |
|     | (a) Types and Estimated Percent cover or density:   |
|     | see Attachment 2  |
| 5.  | What is the pH range of soil before mining? 8.9 to 9.3 pH  Name of Person or Agency and method of determining pH  see Attachment 2  |
| 6.  | Site elevation above sea level Approximately 5000 feet  |
| 7.  | In case of coal, oil shale, and bituminous sandstone:  Principal seam(s) and thickness(es) N/A  |
| 8.  | Estimated duration of mining operations <u>15 years</u>   |
| 9.  | Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (X ) No Does the above material being moved have any other characteristics affecting revegetation? |
| LO. | Will any underground workings or aquifers be encountered? ( ) Yes $(X)$ No Describe   |
|     | Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (X) No If yes, describe the quality of water being discharged.                            |

Describe specifically a detailed procedure for: see Attachment I The mining sequence The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades. (c) The procedure for site preparation including removing trees and brush. (d) The method for removing and stockpiling topsoil or disturbed materials. The method for the placement or containment of all disturbed (e) materials, to include the method for handling of all acid or alkali-producing and toxic materials. (f) A procedure for final stabilization of disturbed materials. GRADING AND REGRADING Specifically describe: see Attachment I (a) Typical cross-section of regrading. The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material. (c) What type of soil treatment will be utilized. (d) The method of drainage control for the final regraded area. (e) Maximum grading slope. TESTING Describe method for testing stability of reclamation fill material. see Attachment 2 Describe method for the testing of soil that is intended to support vegetation see Attachment 2 2. Describe any soil treatment employed as an aid to revegation see Attachment 2 Describe surface preparation of areas intended to support vegetation: 3. see Attachment 2 PEVECETATION 1

| <ul> <li>( ) Hydroseeding</li> <li>( ) Aerial Seeding</li> <li>( ) Conventional or Rangeland Drilling</li> <li>( ) Broadcast and Drag</li> <li>( ) Other</li> </ul> |
|---|
|   |

| Type:   |   | Rate/A                           | cre                                | 1bs.                     |
|---|---|----------------------------------|------------------------------------|--------------------------|
| Revegetation Pla                                      | an and Schedul                                    | e - see Attac                    | chment 2                           |                          |
| Species   | Rate/<br>Acre                                     | Planting<br>Location             | Facing<br>N-S-E-W                  | Season to<br>be replante |
|   |   |                                  |                                    |                          |
|   |   |                                  |                                    |                          |
|   |   |                                  |                                    |                          |
|   |   |                                  |                                    |                          |
|   |   |                                  |                                    |                          |
| Will affected as                                      | rea he subject                                    | to livestock o                   | r wildlife gra                     | zing?                    |
| Will affected at<br>( ) Yes ( )<br>see Atta           | ) No Will veg                                     | to livestock orgentation protect |                                    |                          |
| ( ) Yes (   | ) No Will veg                                     |                                  |                                    |                          |
| ( ) Yes (   | ) No Will veg                                     | getation protect                 | ion be needed?                     |                          |
| ( ) Yes ( see Attack Will irrigation Describe mainter | ) No Will veg chment 2  be used: ( nance procedur | ) Yes ( ) No                     | ion be needed?  Type <u>see At</u> | tachment 2               |
| ( ) Yes ( see Attac                                   | ) No Will veg chment 2  be used: ( nance procedur | ) Yes ( ) No                     | ion be needed?  Type <u>see At</u> | tachment 2               |
| ( ) Yes ( see Attack Will irrigation Describe mainter | ) No Will veg chment 2  be used: ( nance procedur | ) Yes ( ) No                     | ion be needed?  Type <u>see At</u> | tachment 2               |

| STATE OF Colorado  |
|--|
| COUNTY OF Mesa   |
| I, R.B. Sewell , having been duly sworn  |
| depose and attest that all of the representations contained in the foregoing   |
| application are true to the best of my knowledge; that I am authorized to  |
| complete and file this application on behalf of the Applicant and this   |
| application has been executed as required by law.  Signed: Plance  |
| Taken, subscribed and sworn to before me the undersigned authority   |
| in my said county, this 4th day of May, 19 79  |
| Notary Public: Yam Newman  |
| My Commission Expires: 4/1/81  |
| PLEASE NOTE:   |
| Section 40-8-13(2) of the Mined Land Reclamation Act provides as follows:  |
| "Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21." |
| Is confidential information contained herein?  |
| YES(Initial)   |
| NO ROO (Initial)   |
| Sections desired to be maintained as confidential information -  |
|  |

MR FORM 8 Page 1 of 2

| Mine: Frank M. Min. File No. ACT/017/017 |
|--|
| File No. <u>ACT/017/017</u>              |
| Submitted by:                            |
| Applicant                                |
| Representative                           |
| Address                                  |
|  |

Division of Oil, Gas, and Mining 1588 West North Temple SLC, UT. 84116

Re: Commitment to Rule M-10

#### Gentlemen:

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards: in its entirety, as adopted by the Board of Oil, Gas, and Mining on March 22n 1978.

The applicant will achieve the reclamation standards for the following categories as outlined from Rule M-10 on all areas of the land affected by this mine, unless a variance is granted in writing by the Division.

| Ru1e     | Category of Commitment   |
|----------|--------------------------|
| M-10(1)  | Land Use                 |
| M-10(2)  | Public Safety & Welfare  |
| M-10(3)  | Impoundments             |
| M-10(4)  | Slopes                   |
| M-10(5)  | Highwalls                |
| M-10(6)  | Toxic Materials          |
| M-10(7)  | Roads and Pads           |
| M-10(8)  | Drainages                |
| M-10(9)  | Structures and Equipment |
| M-10(10) | Shafts and Portals       |
| M-10(11) | Sediment Control         |
| M-10(12) | Revegetation             |
| M-10(13) | Dams                     |
| M-10(14) | Soils                    |

I believe a variance is justified on a site-specific basis for the following subsections of Rule M-10 for reclamation on this mine and have enclosed as an attachment to this letter a narrative statement setting forth a description of the extent of the variance request and factual reasons for said variance request.

| Rule                                | Category of Variance Request (Narrative Attached |
|-------------------------------------|--|
|                                     |  |
|                                     |  |
|                                     |  |
|                                     |  |
|                                     |  |
| STATE OF Colorodo                   |  |
| COUNTY OF Mesa                      |  |
| I, R.B. Sewell                      | , having been duly sworn depose                  |
| and attest that all of the represen | tations contained in the foregoing application   |
| are true to the best of my knowledg | e; that I am authorized to complete and file     |
| this application on behalf of the A | pplicant and this application has been executed  |
| as required by law.                 |  |
|                                     | Signed: RBDewelf                                 |
| Taken, subscribed and sworn to      | before me the undersigned authority              |
| in my said county, this 4th         | day of   |
|                                     | Notary Public: Pam Nouman                        |
| My Commission Expires: $4/1/81$     |  |

## ATTACHMENT 1

Mine development will commence from the surface and a decline driven to below the ore horizon at approximately 15°. Double entry haulage drifts will be developed from the bottom of the incline to the extremities of the ore bodies. Laterals will be driven at an angle from the haulage through the ore horizon and stoping carried out on a room and pillar retreat procedure. Mining and maintenance methods will be carried out in a safe and orderly manner. The mine is non-alkali or acid producing. Waste rock will be stored in a natural canyon like depression that relates to the 500 year flood requirement under the EPA hazardous waste regulations.

Some modification to the present access roads will be necessary to reduce the grade to approximately 6% to 8%.

Site preparation will be completed by grading existing waste material for level entry. No removal of trees and very little brush is necessary.

Any upper horizon material encountered will be stockpiled in an independent area for final reclamation.

Portal and ventilation shaft(s) will be sealed to prevent unauthorized or accidental entry at the close of the operation.

Waste dumps will be contoured for natural draining configuration. Extraneous debris, unusable building, and scrap metal and wood will be removed from the location or burried.

All disturbed surface will be regraded, stockpiled soil added and seeded. Access roads will be graded out to conform to natural surroundings and reseeded.

ATTACHMENT 1 Page 2

Typical cross-section of regrading will be the natural .

angle of repose. The mined material is of the same formation
as the upper horizon material.

The type of soil treatment will be determined after ? study with test plots.

Drainage control for the regraded area will not be necessary as the drainage is natural and will not be affected.

The maximum grading slope will be to the natural angle or repose, approximately zero to sixty degrees.

Note: Attachment la is a drawing of the typical cross section.

## ATTACHMENT 2

The Bureau of Land Management controls the surface use of the area in the vicinity of the proposed mine and has designated it as a multiple use resource area. Primary uses of the area are for grazing and mineral exploration and mining. Wildlife use of the area is very low because of the aridity of the region. As will be noted on maps of the general area, there has been extensive uranium exploration and mining activities that have cocurred since the 1940's. Within a two mile radius of the proposed mine there are many miles of drill roads and thousands of drill holes. Most of the drill roads and pads in this vicinity, including ones constructed many years ago, have been reclaimed by Plateau. Proposed land uses for the future are grazing, wildlife habitat, and possibly further mineral exploration and development.

The vegetation indigenous to this area classifies it as being in the upper division of the Lower Sonoran Life zone. Blackbrush (Coleogyne ramosissima) and ephedra (Ephedra torreyanae) are the dominant shrubs. Singleleaf ash (Fraxina anomala) and cliffrose (Cowania mexicana) are predominate near intermittent drainages. Winterfat (Ceratoides lanata), fourwing saltbush (Atriplex canescens), snakeweed (Gutierrezia spp.), and sagebrush (Artemisia spp.) are common on the site. Utah juniper (Juniperus osteosperma) dominates in some areas including the canyon in which waste material will be dumped. Herbaceous perennials include Eriogonum, spp. and Oxytropis spp. The site elevation is approximately five thousand feet above sea level. Average annual precipitation is 7 to 9 inches. Summer temperatures exceed 100° F., and winter temperatures are often below freezing.

ATTACHMENT 2 Page 2

Soil pH ranges from 8.9 to 9.3 as determined by Mr. Jay Davis, Environmental Technician who followed procedures outlined in the <u>Handbook of Analytical Procedures</u>, Lucius Pitkin, Inc. The material to be mined is from the same formation as the existing surface material so their pH's should be similar. Seams of coal, oil shale, or bituminous sandstone should not be encountered.

All waste fill material will be contained within ? the side walls of the canyon so stability tests will not be required. Test plots will be initiated as soon as enough fill material has been placed in the canyon to provide a surface representative of the final composition and grade. Samples of the fill material will be tested prior to test plot planting to determine soil ammendments that may be necessary. Soil treatments and surface preparation methods will be determined by the use of test plots and soil analyses. Preliminary indications from arid land research data lead to the conclusion that an organic mulch and fertilizer may be needed, and some means of water collection will probably be necessary. The test plots will study which native species for which seed is commercially available and will survive and yield the highest degree of protection from erosion.

Overburden removed from the portal will be stockpiled nearby and will be stabilized by mulching and revegetating it. When the mine is abandoned, the stockpiled overburden will be placed in such a way as to approximate natural contours and minimize the visual impact. Revegetated areas will be planted in the fall by broadcasting or drilling by Plateau personnel or contractors under the direct supervision of the reclamation staff.

No plans to irrigate either the replaced topsoil or the mine waste dump have been promulgated at this time. Due ATTACHMENT 2 Page 3

to the scarcity of surface water and the extremely low grazing potential of this area, no fences or other vegetation protection will be needed.

The revegetated site will be revisited on a regular basis to determine what, if any, additional management is needed.